

Application No. 10/537,583
WSGR Reference No. 35813-703.831
Examiner: Oluwatosin Ogunbiyi
February 20, 2009
Via facsimile

PROPOSED CLAIMS:

1. (Currently Amended) A method of screening or testing for candidate anti-fungal compounds that impair *Candida albicans* ATP(CTP):tRNA nucleotidyltransferase enzyme (CCA1) activity comprising:

- a) providing fungal *Candida albicans* CCA1 that is an essential gene in *Candida albicans*;
- b) providing one or more candidate compounds;
- c) contacting said CCA1 with said one or more candidate compounds; and
- d) determining the ability of the candidate compound to inhibit CCA1 activity.

2-7. (Canceled)

8. (Currently Amended) A method of screening or testing for candidate anti-fungal compounds that impair *Candida albicans* ATP(CTP):tRNA nucleotidyltransferase enzyme (CCA1) activity that is essential in *Candida albicans* comprising:

- a) providing a *C. albicans* cell wherein the cell expresses *Candida albicans* ATP(CTP):tRNA nucleotidyltransferase enzyme (CCA1) under the control of a heterologous promoter;
- b) providing one or more candidate compounds;
- c) contacting said one *Candida albicans* cell(s) with the said one or more candidate compounds;
- d) determining whether the candidate compound inhibits growth or viability of the cell(s);
and
- e) determining whether the candidate compound is a CCA1 inhibitor in a tRNA nucleotidyl transferase assay.

9-13. (Canceled)

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14. (Withdrawn) The method according to claim 18 wherein the fungal infection is a topical, mucosal or systemic fungal infection.
15. (Withdrawn) The method according to claim 14 wherein the topical or mucosal fungal infection is caused by species of *Candida* or the systemic fungal infection is caused by species of *Candida* or *Aspergillus*.
16. (Withdrawn) The method according to claim 18 wherein said compound impairs fungal CCA1 function to a greater extent than host CCA1 function.
17. (Canceled)
18. (Withdrawn) A method for the treatment or prevention of fungal infections in a host, which comprises administering to the host a therapeutically or prophylactically effective amount of a CCA1 inhibitor.
19. (Withdrawn) A method for the treatment or prevention of fungal infections in a subject who is immunosuppressed, which comprises the step of administering to the subject a therapeutically or prophylactically effective amount of a CCA1 inhibitor.
20. (Withdrawn) The method according to claim 19 wherein the fungal infection is a topical, mucosal or systemic fungal infection.
21. (Withdrawn) The method according to claim 19 wherein the topical or mucosal fungal infection is caused by species of *Candida* or the systemic fungal infection is caused by species of *Candida* or *Aspergillus*.
22. (Withdrawn) The method according to 19 wherein said compound impairs fungal CCA1 function to a greater extent than host CCA1 function.
23. (Previously Amended) The method of claim 1, wherein said determining in step d) is determining the ability of the candidate compound to inhibit CCA1 activity in a translation assay or a tRNA nucleotidyl transferase assay.

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24. (Previously Presented) The method of claim 23, wherein said determining in step d) is determining the ability of the candidate compound to inhibit CCA1 activity in a tRNA nucleotidyl transferase assay.

25. (Previously Presented) The method of claim 24, wherein said tRNA nucleotidyl transferase assay uses a labeled nucleotide.

26. (Previously Presented) The method of claim 25, wherein said tRNA nucleotidyl transferase assay uses a radiolabeled nucleotide.

27. (Previously Presented) The method of claim 8, wherein said providing in step a) is providing a *C. albicans* cell wherein the cell expresses *Candida albicans* ATP(CTP):tRNA nucleotidyltransferase enzyme (CCA1) under the control of an inducible heterologous promoter.

28. (Previously Presented) The method of claim 27, wherein said heterologous promoter is a tet- promoter.

29. (Previously Presented) The method of claim 27, further comprising, prior to step d), inducing said heterologous promoter.

30. (Cancelled) The method of claim 8, wherein said determining in step e) is determining the ability of the candidate compound to inhibit CCA1 activity in a tRNA nucleotidyl transferase assay.

31. (Previously Presented) The method of claim 8, wherein said tRNA nucleotidyl transferase assay uses a labeled nucleotide.

32. (Previously Presented) The method of claim 31, wherein said tRNA nucleotidyl transferase assay uses a radiolabeled nucleotide.

33. (Previously Presented) The method of claim 8, further comprising comparing the growth or viability of said cells in step d) with the growth or viability of a sample of *C. albicans* cells in which the heterologous promoter is repressed.

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34. (Previously Presented) The method of claim 33, wherein said heterologous promoter is a tet promoter.

35. (Previously Presented) The method of claim 34, wherein said tet promoter is repressed by the addition of tetracycline or doxycycline to said sample of *C. albicans* cells.